

# NASA Academy Agenda

Topic: Bonding Weekend in Pennsylvania

Date: Saturday - June 7, 2003

07:30-08:00: Breakfast (on your own)  
08:00-08:15: Depart Academy house  
08:15-12:00: Drive to Laurel Caverns (3.5-4.0 hrs)  
12:00-13:00: Lunch  
13:00-13:30: Meet up with Alumni  
13:30-14:00: Pay for spelunking  
14:00-17:00: Caving/Spelunking at Laurel Caverns  
17:00-17:30: Depart for Chalk Hill Inn  
17:30-17:45: Check in to the Inn  
17:45-18:15: Personal time  
18:15-18:30: Depart to meet Dr. Bush – Top of the mountain  
18:30-19:30: Dinner – Uniontown  
19:30-20:30: Ground Water Aquifer monitoring system demonstration – Connellsville Airport  
20:30-21:30: Demonstration conclusion – Penn State lab  
21:30: Return to Chalk Hill Inn

## **Groundwater Pump Test**

### **Connellsville Airport (VVS)**

The student of the NASA Academy will conduct a simulated “48-hour” Drawdown Pump Test within a confined aquifer of sandstone characteristics. This pump test will be initiated with the placement of a low flow submersible pump within a groundwater-monitoring well that is severing the deep sandstone strata. Prior to installing the pump, well volume calculation will be required and will be performed from the data acquired from measuring the static water level with an Interface Probe. Once the submersible pump is activated, the students will measure the static water level within an adjacent monitoring well and/or wells at different time intervals and determine if the “Cone of Depression” is present or not.

This test will be performed at a closed groundwater remediation site within the legal boundaries of the Connellsville Airport. The guest speaker will prelude the pump test with a history of the released regulated petroleum materials into the Vadose and Phreatic Groundwater Zones and the remedial efforts (5-year period) required to obtain a closure from the Pennsylvania Department of Environmental Protection.